

UTILITY PATENT APPLICATION TRANSMITTAL

(only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	1875.4850000
First Inventor	Scott A. CUMMINGS
Title	System, Method, And Computer Program Product For Utilizing Proprietary Communication Parameters To Improve Channel Efficiency In A DOCSIS-Compliant Broadband Communication System
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

- ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
- ☐ Applicant claims small entity status.
See 37 CFR 1.27.
- ☒ Specification [Total Pages 45]
(preferred arrangement set forth below)
 - Descriptive title of the Invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 16]
- Oath or Declaration [Total Pages 2]
 - ☒ Newly executed (original or copy)
 - ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- ☒ Application Data Sheet. See 37 CFR 1.76.

- ☐ CD-ROM or CD-R in duplicate, large table or Computer Program
(Appendix)
- Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - ☐ Computer Readable Form (CRF)
 - Specification Sequence Listing on:
 - ☐ CD-ROM or CD-R (2 copies); or
 - ☐ paper
 - ☐ Statements verifying identity of above copies

16834 U.S. PTO
10/682536

101003

ACCOMPANYING APPLICATION PARTS

- ☒ Assignment Papers (cover sheet & document(s))
- ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney
- ☐ English Translation Document (if applicable)
- ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
- ☐ Preliminary Amendment
- ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
- ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
- ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
- ☒ Other: Authorization under 37 C.F.R. § 1.136(a)(3)
- ☒ Other: The name of the assignee is: Broadcom Corporation

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP) of prior application No: /
Prior application information: Examiner Art Unit:

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number 26111

or ☐ Correspondence address below

NAME	STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.				
	Attorneys at Law				
ADDRESS					
CITY		STATE		ZIP CODE	
COUNTRY		TELEPHONE		FAX	

NAME (Print/Type)	Thomas C. Fiala	Registration No. (Attorney/Agent)	43,610
SIGNATURE	<i>Thomas C. Fiala</i>	Date	10/10/05

**FEE TRANSMITTAL
for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

Complete if Known

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	Scott A. CUMMINGS
Examiner Name	To Be Assigned
Art Unit	To Be Assigned
Attorney Docket No.	1875.4850000

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT (\$)** 1098.00**METHOD OF PAYMENT (check all that apply)**☐ Check ☒ Credit card ☐ Money Order ☒ Other** ☐ None

** Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

☐ Deposit Account
Deposit Account Number 19-0036

Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any over payments☐ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
----------	----------	----------	----------	-----------------	----------

1051 130 2051 65 Surcharge - late filing fee or oath

1502 50 2052 25 Surcharge-late provisional filing fee or cover sheet

1053 130 1053 130 Non-English specification

1812 2,520 1812 2,520 For filing a request for *ex parte* reexamination

1804 920* 1804 920* Requesting publication of SIR prior to Examiner action

1805 1,840* 1805 1,840* Requesting publication of SIR after Examiner action

1251 110 2251 55 Extension for reply within first month

1252 420 2252 210 Extension for reply within second month

1253 950 2253 475 Extension for reply within third month

1254 1,480 2254 740 Extension for reply within fourth month

1255 2,010 2255 1,005 Extension for reply within fifth month

1401 330 2401 165 Notice of Appeal

1402 330 2402 165 Filing a brief in support of an appeal

1403 290 2403 145 Request for oral hearing

1451 1,510 1451 1,510 Petition to institute a public use proceeding

1452 110 2452 55 Petition to revive - unavoidable

1453 1,330 2453 665 Petition to revive - unintentional

1501 1,330 2501 665 Utility issue fee (or reissue)

1502 480 2502 240 Design issue fee

1503 640 2503 320 Plant issue fee

1460 130 1460 130 Petitions to the Commissioner

1807 50 1807 50 Processing fee under 37 CFR 1.17(q)

1806 180 1806 180 Submission of Information Disclosure Stmt

8021 40 8021 40 Recording each patent assignment per property (times number of properties) \$40.00

1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a))

1810 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b))

1801 770 2801 385 Request for Continued Examination (RCE)

1802 900 1802 900 Request for expedited examination of a design application

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40.00**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	\$770.00
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1105	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$) 770.00**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

	Extra	Fee from below	Fee Paid
Total Claims 36 - 20** = 16	X \$18.00	= \$288.00	
Indep. Claims 3 - 3** =	X	=	
Multiple Dependent		=	

Large Entity Small Entity


Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	**Reissue independent claims over original patent
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 288.00

**or number previously paid, if greater; For Reissue, see above

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Thomas C. Fiala	Registration No. (Attorney/Agent)	43,610	Telephone	202-371-2600
Signature				Date	10/10/03

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cornwell
Robert W. Esmond
Tracy-Gene G. Durkin
Michele A. Cimbala
Michael B. Ray
Robert E. Sokohl
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Alcorn
Robert C. Millonig
Lawrence B. Bugaisky
Donald J. Featherstone
Michael V. Messinger

Judith U. Kim
Timothy J. Shea, Jr.
Patrick E. Garrett
Heidi L. Kraus
Edward W. Yee
Albert L. Ferro*
Donald R. Banowitz
Peter A. Jackman
Molly A. McCall
Teresa U. Medler
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Albert J. Fasulo II*
Eldora Ellison Floyd
Thomas C. Fiala
Brian J. Del Buono
Virgil Lee Beaton*

Kimberly N. Reddick
Theodore A. Wood
Elizabeth J. Haanes
Bruce E. Chalker
Joseph S. Ostroff
Frank R. Cottingham
Christine M. Lhullier
Rae Lynn Prengaman
Jane Shershenovich*
Lawrence J. Carroll*
George S. Bardmesser
Daniel A. Klein*
Rodney G. Maze
Jason D. Eisenberg
Michael A. Specht*
Andrea J. Kamage
Tracy L. Muller*
Jon E. Wright*

LuAnne M. Yuricek*
Registered Patent Agents*
Karen R. Markowicz
Nancy J. Leith
Ann E. Summerfield
Helene C. Carlson
Gaby L. Longworth
Matthew J. Dowd
Aaron L. Schwartz
Angelique G. Uy
Mary B. Tung
Katrina Y. Pei
Bryan L. Skelton
Robert A. Schwartzman
John J. Figueroa
Timothy A. Doyle
Jennifer R. Mahalingappa

Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford

Of Counsel
Kenneth C. Bass III
Lisa A. Dunner
Evan R. Smith

*Admitted only in Maryland
*Admitted only in Virginia
*Practice Limited to
Federal Agencies

October 10, 2003

WRITER'S DIRECT NUMBER:

(202) 772-8835

INTERNET ADDRESS:

TFIALA@SKGF.COM

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Patent Application

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)
Appl. No. To Be Assigned; Filed: Herewith
For: **System, Method, And Computer Program Product For Utilizing
Proprietary Communication Parameters To Improve Channel
Efficiency In A DOCSIS-Compliant Broadband Communication
System**
Inventor(s): Scott A. CUMMINGS
Our Ref: 1875.4850000

Sir:

The following documents are forwarded herewith for appropriate action by the U.S.
Patent and Trademark Office:

1. PTO Fee Transmittal (Form PTO/SB/17);
2. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
3. U.S. Utility Patent Application entitled:

**System, Method, And Computer Program Product For Utilizing Proprietary
Communication Parameters To Improve Channel Efficiency In A DOCSIS-
Compliant Broadband Communication System**

and naming as inventor(s):

Scott A. CUMMINGS

the application consisting of:

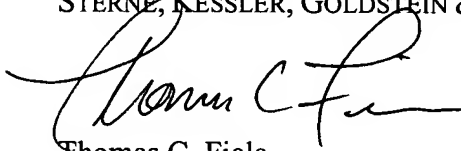
- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. A copy of the original executed Declaration;
- c. A specification containing:
 - i. 37 pages of description prior to the claims;
 - ii. 7 pages of claims (36 claims);
 - iii. a one (1) page abstract;
- d. 16 sheets of drawings: (Figures 1-16);
- 4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
- 5. Recordation Form Cover Sheet;
- 6. A copy of an original executed Assignment to **Broadcom Corporation**, recordation of which is hereby respectfully requested;
- 7. An Information Disclosure Statement (IDS);
- 8. Form PTO-1449 (1 page) with THREE (3) accompanying documents;
- 9. Two (2) return postcards; and
- 10. Form PTO-2038 Credit Card Payment Form for \$1098.00 to cover:
 - \$ 770.00 Filing fee for patent application;
 - \$ 40.00 Assignment recordation fee(s); and
 - \$ 288.00 Fee for excess claims.

Commissioner for Patents
October 10, 2003
Page 3

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read 'Thomas C. Fiala', written in a cursive style.

Thomas C. Fiala
Attorney for Applicant
Registration No. 43,610

TCF/mjg
Enclosures
SKGF_DC1:186849.1